CONTENTS

PART 1. FEBRUARY

PAGE

DOGGETT, H., and MAJISU, B. N. (Uganda). Disruptive selection in crop development 1

EVANS, G. M. (Aberystwyth). Nuclear changes in flax 25

WALTERS, MARTA SHERMAN (Santa Barbara). Ribonucleoprotein structures in meiotic prophase of *Zea mays* 39

COOPER, D. W., and RENDEL, J. (Uppsala). Incomplete family data, selection and population studies of transferrins and blood groups in cattle . . 49

HARRISON, B. J., and FINCHMAN, J. R. S. (John Innes). Instability at the *pal* locus in *Antirrhinum majus*. 3. A gene controlling mutation frequency . 67

SYBENGA, J. (Wageningen). Orientation of interchange multiples in *Secale cereale* 73

BARKER, J. F. (Ibadan). Polymorphism in West African snails . . . 81

MCNEILLY, T. (Bangor). Evolution in closely adjacent plant populations. III. *Agrostis tenuis* on a small copper mine 99

RAPER, JOHN R., and RAUDASKOSKI, MARJATTA (Harvard). Secondary mutations at the *Bβ* incompatibility locus of *Schizophyllum* . . . 109

WATTS, L. E. (New Zealand). Levels of compatibility in *Brassica oleracea* . 119

PEDERSON, D. G. (North Carolina). Environmental stress, heterozygote advantage and genotype-environment interaction in *Arabidopsis* . . 127

NOTES AND COMMENTS:

HASKELL, G. Biochemical differences between spontaneous and colchicine-induced autotetraploids 139

SCUDO, FRANCESCO M. On mixtures of inbreeding systems . . . 142

LAWRENCE, C. W. Effect of fractionated doses of radiation on recombination 143

RAY-CHAUDHURI, S. P., KAKATI, S., and SHARMA, T. Split and enlarged satellites in man 146

ELLIS, J. R., and BARTON, D. M. Thermo-electric cooling for making permanent cytological preparations 149

WARBURTON, FREDERICK E. Maintenance of histocompatibility polymorphisms 151

LINTS, F. A., and DELCOUR, JEAN. Galton and the Mendelian ratios . 153

OLBY, R. C. Galton's ratios 155

REVIEWS:

RICHTER, SUSANNE. Untersuchungen uber die hereditat des strabismus concomitants (Investigations concerning strabismus concomitants) . 157

STERN, C., and SHERWOOD, E. R. The origin of genetics: a Mendel source book 157

PAGE

MORTON, NEWTON E., CHUNG, CHIN S., and MI, MING-PI. Monographs in human genetics. Vol. 3: Genetics of inter-racial crosses in Hawaii 158

BARTALOS, M., and BARAMKI, TH. A. Medical cytogenetics 159

BOOKS RECEIVED 161

GENETICAL SOCIETY OF GREAT BRITAIN: Abstracts of Papers 162

PART 2. MAY

DAY, J. C. L., and DOWDESWELL, W. H. (Winchester). Natural selection in *Cepaea* on Portland Bill 169

MURRAY, J. (Charlottsville), and CLARKE, B. (Edinburgh). Inheritance of shell size in *Partula* 189

FRANÇA, Z. M., DA CUNHA, A. B., and GARRIDO, M. C. (São Paulo). Recombination in *Drosophila willistoni* 199

MCNEILLY, T., and ANTONOVICS, J. (Bangor). Evolution in closely adjacent plant populations. IV. Barriers to gene flow 205

ANTONOVICS, J. (Bangor). Evolution in closely adjacent plant populations. V. Evolution of self-fertility 219

WILCOX, J. R. (Purdue), and FARMER, R. E. (Stoneville). Heritability and C effects in early root growth of Eastern Cottonwood cuttings . . 239

JAIN, H. K., RAUT, R. N., and KHAMANKER, Y. G. (Delhi). Base specific chemicals and mutation analysis in *Lycopersicon* 247

LANCASTER, F. M. (Newport). Sex-linked winglessness in the fowl . . 257

WHITTEN, M. J. (Tasmania). Genetical control of penetrance and evolution of dominance in *Drosophila* 263

PARKER, P. F. (Liverpool). Genetic variation in diploid *Dactylis*. I. Cross compatibility and seedling characters 279

EVANS, G. M. (Aberystwyth). Induced chromosomal changes in *Linum* . 301

REVIEWS:

SINGLETON, W. R. Elementary Genetics 311

RAJKI, S. Autumnization and its Genetic Interpretation . . . 312

TENTH EUROPEAN CONFERENCE ON ANIMAL BLOOD GROUPS AND BIOCHEMICAL POLYMORPHISMS 312

SPICKETT, S. G. Endocrine Genetics 313

WOLSTENHOLME, G., and PORTER, R. (eds.). Drug Responses in Man . 314

PANTELOURIS, E. M. Introduction to Animal Physiology and Physiological Genetics 315

VOLPE, E. P. Understand Evolution 317

COON, C. S. The Living Races of Man 317

ESSEN-MÖLLER, E. Familial Interrelatedness in a Swedish Rural Population 319

BOOKS RECEIVED 320

69 137 AA A 30

PART 3. AUGUST

PAGE

LAWRENCE, C. W. (Wantage). Radiation-induced polygenic mutation in *Arabidopsis thaliana*. I. Selection for flowering time 321

PERKINS, JEAN M., and JINKS, J. L. (Birmingham). Environmental genotype-environmental components of variability. III. Multiple lines and crosses 339

HAYWARD, M. D., and BREESE, E. L. (Aberystwyth). The genetic organisation of natural populations of *Lolium perenne* L. 357

PARKER, P. F. (Liverpool). Genetic variations in diploid Dactylis. II. Emergence date and some morphological and physiological leaf characters 369

CONNOLLY, V., and SIMCHEN, G. (Birmingham). Linkage to the incompatibility factors and maintenance of genetic variation in selection lines of *Schizophyllum commune* 387

KEARSEY, M. J., and JINKS, J. L. (Birmingham). A general method of detecting additive, dominance and epistatic variation for metrical traits. I. Theory 403

JAIN, S. K., and MARSHALL, D. R. (California). Simulation of models involving mixed selfing and random mating. I. Stochastic variation in outcrossing and selection parameters 411

BARNES, B. W. (Birmingham). Stabilising selection in *Drospohila melanogaster* 433

BUTCHER, A. C. (Birmingham). The relationship between sexual outcrossing and heterokaryon incompatibility in *Aspergillus nidulans* 443

NOTES AND COMMENTS

JONES, D. A. On the polymorphism of cyanogenesis in *Lotus corniculatus*. L. II. The interaction with *Trifolium repens* 453

REVIEWS:

Biochemical Genetics, Vol. 1, Nos. 1 and 2, 1967 457

STUBBE, H. (Ed.). Induced mutations and their utilisation . . . 457

EVANS, H. J., COURT-BROWN, W. M., and MCLEAN, A. S. (Eds.). Human radiation cytogenetics 458

ÖKRÖS, S. The heredity of Papillary patterns 460

HIRSCH, J. (Ed.). Behavior-genetic analysis 460

HARRISON, R. J. Reproduction and man 463

MATHEWS, B. F. Chemical exchanges in man, a physiological essay. Porphyria—a royal malady 463

KRATOCHVIL, C. H., and KARGER, S. (Eds.). First Holloman Symposium on primate immunology and molecular genetics 465

SCHWANITZ, F. Die Evolution der Kulturpflanzen 466

GENETICAL SOCIETY OF GREAT BRITAIN: Abstracts of Papers . . . 467

PART 4. NOVEMBER

COSTANTINO, R. F. ROGLER, J. C., and BELL, A. E. (Purdue). Genetic analysis of a population of *Tribolium*. II. Metabolic pattern of corn oil sensitive anomally 477

O'GOWER, A. K., and NICOL, P. I. (New South Wales). A latitudinal cline of haemoglobins in a bivalve mollusc 485

PAGE

RICHARDSON, R. H., KOJIMA, K., and LUCAS, H. L. (Austin and Raleigh). An analysis of short-term selection experiments 493

ANOTONOVICS, J. (Bangor). Evolution in closely adjacent plant populations. VI. Manifold effects of gene flow 507

PERKINS, JEAN M., and JINKS, J. L. (Birmingham). Environmental and genotype-environmental components of variability. IV. Non-linear interactions for multiple inbred lines 525

NUTMAN, P. S. (Harpenden). Symbiotic effectiveness in nodulated red clover. The *n* and *d* factors for ineffectiveness 537

GALE, J. S., and KEARSEY, M. J. (Birmingham). Stable equilibria under stabilising selection in the absence of dominance 553

BARNES, B. W. (Birmingham). Maternal control of heterosis for yield in *Drosophila melanogaster* 563

LAWRENCE, C. W. (Wantage). Radiation-induced polygenic mutation in *Arabidopsis thaliana*. II. Analysis of lines selected for flowering time . 573

NEIL JONES, R., and REES, H. (Abersytwyth). Nuclear DNA variation in *allium* 591

NOTES AND COMMENTS:

OYIDI, O. The influence of advancing age on chiasma frequency is *Phymateus cinctus* fav. (Acrididae) 607

SOULE, M. E., and BAKER, B. Phenetics of natural populations. IV. The population asymmetry parameter in the butterfly *Coenonympha tullia* 611

COOPER, D. W. The significance level in multiple tests made simultaneously. 614

KEARSY, M. J., and GALE, J. S. Stabilising selection in the absence of dominance: an additional note 617

REVIEWS:

HASKELL, G., and WILLS, A. B. Primer of Chromosome Practice . . 621

KIRK, J. T. O., and TILNEY-HASSETT, R. A. E. The Plastids . . 621

GENETICAL SOCIETY OF GREAT BRITAIN: Abstracts of Papers . . . 623

INDEX OF AUTHORS 633

INDEX OF SPECIES 641

INDEX OF SUBJECTS 643